

Market Survey Of The

Pig International

Audience

Geographic Analysis of:

- Number of Pigs; Future Expansion
- Breeding Stock; Buying Considerations
- Preparing and Supplying Feed
- Pig Health Problems; Control Practices
- Pig Equipment; Buying Plans
- Buying Information Sources
- Other Information

December 1990

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PIG INTERNATIONAL MARKET SURVEY

Purpose of Survey

The main purpose of this 1990 survey of the PIG INTERNATIONAL audience was to update the bulk of the market information collected in 1986, with more herd segmentation, and to permit measurements of intervening changes as a guide to the future.

SURVEY METHOD

Sample Design:

Every nth name was computer-drawn from the February 15 1990 PIG INTERNATIONAL BPA qualified circulation list of those classified as "commercial pig breeders (farrowing operation)" and/or "commercial pig producers (finishing operation)" in Europe, Africa, Asia, and islands of the Pacific Ocean. The value of n was such as to cover these lists and yield some 1,300 names. The list was arranged in country number sequence during the nth name extraction.

Sample Size:

	Combined Areas	Europe	Asia/Pacific and Africa
Number in mailing sample...	1,295	482	813
Number of usable returns...	854	314	540
Percent usable response....	65.9%	65.1%	66.4%

Respondents replied without a tangible incentive, and, instead, furnished their own international airmail postage.

Questionnaire Design:

The questionnaire was designed to obtain the information felt most needed by the PIG INTERNATIONAL staff. The order, arrangement, and wording of the questions were guided by generally accepted mail survey technique.

Mailing Procedure:

Computer-printed control cards containing the survey sample names and other information were numbered consecutively. Each questionnaire mailed was also numbered to match the number assigned the recipient on the card.

The first mailing went out February 27 1990. On March 14th a postal card reminder was mailed to each person on the sample list.

A follow-up questionnaire was mailed on April 10th to all non-respondents.

A third questionnaire - second follow-up - identical to those in the earlier mailings was mailed to second-mailing non-respondents on May 31 1990.

Tabulation and Report Writing:

The survey returns were tabulated by Analytical Computer Service Inc. and the Watt Publishing Co. Research Section which wrote this report.

PIG INTERNATIONAL MARKET SURVEY

HIGHLIGHTS

- ◇ 1. PIG INTERNATIONAL farrowers had a **median*** inventory of **275 sows** each on the farm at survey time (spring 1990) - up from 200 in a survey reported in 1986; the number of farrowers with **500** or more sows grew from 22% to **34%**, and **18%** had **1,000** or more sows. Meanwhile the **arithmetic average** number of sows leaped from 499 to **945 per farrower**. (page 5, item 2)
- ◇ 2. The **median** number of pigs of all types on the farm at survey time jumped from the earlier-reported 1,500 to **2,450** per producer; **15%** of all producers had **10,000** or more pigs - up from 9%. The **arithmetic average**, meanwhile, surged from 4,500 to **6,300 pigs per producer**. (page 6; item 2)
- ◇ 3. In answer to the question "Do you expect to expand your pig production in the next 24 months?" **52%** of the producers said **"Yes"** - ranging from 34% in Europe to **62%** in the rest of the Eastern Hemisphere. (item 3)
- ◇ 4. Among producers who have breeding sows . . .
 - (a) **62%** obtain some or all of their gilt replacements from **hybrid** companies and/or **purebred** breeders - up from the earlier-reported 51%, while 60% obtain gilts from their own herd - down from 73%, and
 - (b) **56%** use a sow **pregnancy detection** machine - up from the earlier-reported 47% - ranging from 49% in Asia/Pacific and Africa (up from 40%) to 69% in Europe (up from 59%). (items 4, 7)
- ◇ 5. Among producers who prepare pig feed on the farm (about 50% of producers), **73%** do so by mixing grains and protein ingredients plus a **vitamin-mineral** premix - up from the earlier-reported 58%. (items 9, 9(a))
- ◇ 6. The finishing feed of **48%** of the pig finishing producers normally contains a **growth promoter**. But **40%** of these producers **changed** their **brand** of growth promoter in 1989. (items 13, 13(a))

*The value in the middle position in a series of values arrayed by size.

(MORE)

HIGHLIGHTS (cont.)

7. **92%** of all farrowers cited pig health problems that were **important** to their **BREEDING** herd in 1989. The problem ranked by the **largest** percent of these farrowers - **50%** - was (1) Enteritis/Diarrhoea, followed by (2) Reproductive Troubles - **43%**, (3) Feet/Leg Troubles - **40%**, (4) MMA/Farrowing Fever - **39%**, and (5) Respiratory Infections - **36%**. The **number** of ranked breeding herd health problems averaged **3.4** per ranker - ranging from 2.6 in Europe to 3.9 in Asia/Pacific and Africa.
- 88%** of all **GROWING-FINISHING** pig producers cited problems important to the health of their pigs in 1989. Ranked by the **largest** percent of these producers - **66%** - was (1) Respiratory Infections, followed by (2) Enteritis/Diarrhoea - **35%**, (3) Feet/Leg Troubles - **25%**, and (4) Stress/PSE - **23%**. The **number** of ranked growing-finishing pig health problems averaged **2.7** per ranker - ranging from 2.2 in Europe to 3.0 in Asia/Pacific and Africa. (pages 10-12)
8. **84%** of the producers give an anthelmintic to their pigs; but of this group, **30%** changed their wormer in 1989. (items 18, 18(c))
9. The percent of producers who use **water sprinklers for cooling** increased from the earlier-reported **22%** to **31%** - ranging from 9% in Europe (up from 4%) to 44% in Asia/Pacific and Africa (up from 34%). The percent who use **power ventilation or fans** increased from 49% to **59%** - ranging from 88% in Europe (up from 76%) to 41% in Asia/Pacific/Africa (up from 31%). **34%** of producers use **automatic or computer control** ventilation or fans - ranging from 13% in Asia/Pacific/Africa to **72%** in Europe. (item 20)
10. As many as **74%** of all producers planned to **buy pig production equipment** in the subsequent two years. The type of equipment planned for purchase by the largest percent of these producers - **61%** - was (1) Feeding Equipment, followed by (2) Ventilation Equipment - **42%**, (3) Flooring - **41%**, (4) Watering Equipment - **40%**, (5) Manure Equipment - **35%**, and (6) Heating Equipment - **24%**. (items 25, 25(a))
11. In answer to the question "Before you buy any housing, equipment, breeding pigs, or health products, where do you look for reliable information about them?" **Magazine Articles** were cited the **second** most often or the **most** often (out of **nine** listed information sources), for all product classes in the Combined Areas, and - when combined with the unduplicated mentions of **Magazine Advertisements** - were cited the **second** most often or the **most** often in each geographic area as well. (item 31)

Methods used in this research study are described in accordance with the **FULL DISCLOSURE FORM FOR BUSINESS PUBLICATION RESEARCH**. Copies are available upon request.

FINDINGS

1. READERS'* PIG BUSINESS ACTIVITIES

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	828	301	527
Percent of readers reporting:			
Farrow and finish for slaughter.....	76%	67%	81%
Farrow and sell piglets (weaners).....	23%	25%	22%
(Either or both of above).....(83%)		(79%)	(85%)
Buy weaned pigs for finishing.....	9%	12%	8%
(Any finishing).....(80%)		(74%)	(84%)
Produce breeding pigs for sale.....	29%	28%	31%
(Any farrowing).....(94%)		(90%)	(96%)
(Any of above).....(97%)		(97%)	(98%)
Slaughter pigs and/or process pigmeat.....	8%	5%	10%
Market pigmeat - whole-sale and/or retail...	9%	3%	12%
Other.....	6%	7%	5%
TOTAL.....	160%	147%	169%

*"Readers" refers to the 42.0% of the February 15 1990 Pig International BPA qualified circulation list classified as "commercial pig breeders (farrowing operation)" and/or "commercial pig producers (finishing operation)" in Europe, Africa, Asia, and islands of the Pacific Ocean. The approximate number in this circulation was 7,740, broken out as follows: Europe - 2,881, and Asia/Pacific and Africa - 4,859.

**"Producers" refers to readers who reported at survey time that they breed and/or grow and finish pigs commercially. Producers in the study numbered approximately as follows: Combined Areas - 7,533; Europe - 2,795; and Asia/Pacific and Africa - 4,738.

2. PRODUCERS'** PIG PRODUCTION VOLUME

	Combined Areas	Europe	Asia/Pacific and Africa
Number Of <u>Sows</u> On Farm			
Respondents..	741	270	471
Among producers who have sows, percent reporting:			
1,000 or more sows....	18%	15%	20%
500 - 999 sows.....	16%	15%	16%
200 - 499 sows.....	32%	38%	29%
Under 200 sows.....	34%	32%	35%

Average*** number of sows per producer having any. 945 sows 1,093 861

Median number of sows per producer having any. 275 sows 260 300

***Arithmetic average.

Number Of Growing-Finishing Pigs On The Farm At Survey Time

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	661	223	438
Among producers who had growing-finishing pigs, percent reporting:			
5,000 or more growing-finishing pigs.....	21%	20%	21%
2,000 - 4,999 growing-finishing pigs.....	27%	31%	25%
1,000 - 1,999 growing-finishing pigs.....	22%	27%	19%
Under 1,000 growing-finishing pigs.....	30%	22%	35%

Average number of growing-finishing pigs on the farm, per producer having any.....4,700 grow- 5,500 4,300
ing-finishing
pigs

Median number of growing-finishing pigs on the farm, per producer having any..... 1,780 grow- 2,000 1,564
ing-finishing
pigs

Pig International Survey (cont.)

2. (cont.)

Number Of Pigs Of ALL Types On The Farm At Survey Time - Including Sows, Boars, And Suckling Or Finishing Pigs

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	706	235	471
Percent of producers reporting:			
10,000 or more pigs....	15%	10%	18%
2,000 - 9,999 pigs.....	45%	47%	43%
1,000 - 1,999 pigs.....	21%	30%	17%
Under 1,000 pigs.....	19%	13%	22%
Average number of pigs of all types on the farm at survey time, per producer.....	6,300 pigs	5,800	6,600
Median number of pigs of all types on the farm at survey time, per producer.....	2,450 pigs	2,275	2,490

3. "Do you expect to expand your pig production in the next 24 months?"

Respondents..	775	282	493
Percent of producers who answered "Yes".....	52%	34%	62%

BREEDING

4. "If you have any breeding sows, what is the source of your GILT replacements?"

Respondents..	765	267	498
Among producers who have breeding sows, percent reporting:			
Hybrid company.....	39%	47%	36%
Purebred breeder.....	30%	19%	35%
(Either or both of above).....	(62%)	(66%)	(63%)
Own herd.....	60%	51%	64%
Other.....	6%	4%	7%

4. (cont.)

(a) "From which source(s) do you obtain BOARS?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	759	263	496
Among producers who have boars, percent reporting:			
Hybrid company....	40%	48%	35%
Purebred breeder..	51%	44%	55%
(Either or both of above).....	(81%)	(81%)	(81%)
Own herd.....	30%	21%	35%
Other.....	10%	8%	11%

5. "What are your two most important considerations when you buy breeding pigs?"

Respondents..	752	257	495
Among producers who have breeding sows, percent reporting:			
Test results.....	56%	56%	57%
Conformation.....	28%	22%	31%
Health status.....	57%	64%	54%
Price.....	11%	5%	14%
Guarantee that all pigs will come from a single source.....	15%	24%	11%
Reputation of supplier	28%	22%	31%
Follow-up service....	7%	5%	9%
Other.....	2%	2%	2%

6. "Do you use artificial insemination to mate sows or gilts?"

Respondents..	770	275	495
Among producers who mate sows or gilts, percent who answered:			
Yes.....	40%	56%	31%
No.....	60%	44%	69%

Pig International Survey (cont.)

6. (cont.)

(a) "If 'Yes' what is the source of the semen?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	305	152	153
Among producers who use artificial insemination to mate sows or gilts, percent reporting:			
Purchased.....	54%	63%	46%
From our own boars.	51%	38%	64%
Other.....	6%	6%	5%

7. "Do you use a sow pregnancy detection machine?"

Respondents..	745	259	486
Among producers who have breeding sows, percent who answered:			
Yes.....	56%	69%	49%
No.....	44%	31%	51%

8. "At about what age do you wean litters?"

Respondents..	768	273	495
Among producers who have breeding sows, percent reporting:			
Under 2 weeks.....	*	-	*
2 weeks.....	1%	-	1%
3 weeks.....	21%	40%	11%
4 weeks.....	49%	45%	52%
5 weeks.....	13%	10%	15%
6 weeks.....	8%	4%	10%
7 weeks or older...	7%	1%	10%

*Less than 0.5%.

FEEDING

9. "What is the source of your pig feed?"

	Combined Areas	Europe	Asia/Pacific and Africa
Piglet Feed			
Respondents..	799	284	515
Percent of producers reporting for piglet feed:			
Prepared on the farm..	46%	21%	60%
Purchased as complete diet.....	55%	79%	41%
Other.....	4%	2%	5%

Other Feed

Respondents..	637	243	394
Percent of producers reporting for other feed:			
Prepared on the farm..	59%	45%	68%
Purchased as complete diet.....	42%	59%	31%
Other.....	4%	3%	5%

(a) "If you prepare feed on the farm, what do you mix?"

Respondents..	499	128	371
Among producers who prepare feed on the farm, percent reporting:			
Grains plus a balancer supple- ment.....	14%	22%	12%
Grains and protein ingredients plus a vitamin-mineral pre.....	73%	64%	77%
Waste by-products plus a balancer supplement.....	12%	13%	11%
All individual ingredients.....	16%	13%	17%
Other.....	4%	1%	5%

Pig International Survey (cont.)

10. "Which of the following types of equipment are used in your pig business for feed preparation and handling?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	725	243	482
Percent of producers reporting:			
Feed grinder.....	50%	38%	56%
Feed mixer.....	64%	47%	72%
Pellet press.....	8%	14%	5%
Powered conveyor or auger.....	30%	37%	27%
Bulk feed bins (storage silos)....	45%	64%	36%
Computer for feed formulation.....	25%	30%	22%
(Any of the above)....(90%)		(95%)	(88%)

11. (cont.)

Supplying Feed To Young Pigs

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	783	279	504
Among producers who have young pigs, percent reporting:			
Manually (by hand)....	71%	59%	78%
Semi-automatically (mechanically but requiring some manual filling).....	23%	30%	20%
Fully automatically (requiring no manual filling).....	10%	17%	6%

11. "How do you supply feed to your pigs?"

Supplying Feed To Sows

Respondents..	787	280	507
Among producers who have sows, percent reporting:			
Manually (by hand)...	71%	49%	84%
Semi-automatically (mechanically but requiring some manual filling)....	24%	35%	18%
Fully automatically (requiring no manual filling)....	13%	30%	3%

Supplying Feed To Growing-Finishing Pigs

Respondents..	771	268	503
Among producers who have growing-finishing pigs, percent reporting:			
Manually (by hand)....	52%	19%	69%
Semi-automatically (mechanically but requiring some manual filling).....	23%	28%	19%
Fully automatically (requiring no manual filling).....	33%	64%	17%

Pig International Survey (cont.)

12. "If you have sows and/or young pigs, do their feeds normally contain medication?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	<u>738</u>	<u>258</u>	<u>480</u>
Percent of farrowers who answered "Yes" for sows	42%	16%	56%
Respondents..	<u>775</u>	<u>275</u>	<u>500</u>
Among producers with young pigs, percent who answered "Yes" for young pigs	73%	51%	84%

13. "If you finish pigs for slaughter, does the finishing feed normally contain a growth promoter?"

Respondents..	<u>762</u>	<u>259</u>	<u>503</u>
Among producers who finish pigs for slaughter, percent who answered "Yes".....	48%	46%	50%

(a) "If 'yes,' did you change your brand of growth promoter in 1989?"

Respondents..	<u>354</u>	<u>114</u>	<u>240</u>
Among producers whose finishing feed normally contains a growth promoter, percent who answered "Yes".....	40%	35%	42%

14. "Which type of feeding system do you use for your pigs, dry, or liquid?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	<u>822</u>	<u>299</u>	<u>523</u>
Percent of producers reporting:			
Dry feeding only....	66%	60%	70%
Liquid feeding only.....	4%	8%	2%
Use both types.....	29%	31%	27%
Other.....	1%	1%	1%

(a) "If you use a liquid feeding system, on which animals?"

Respondents..	<u>245</u>	<u>108</u>	<u>137</u>
Among producers who feed liquid feed, percent reporting:			
Breeding sows only.....	17%	5%	26%
Growing-finishing pigs only.....	39%	56%	26%
Both breeding and finishing pigs.....	38%	34%	41%
Other.....	6%	5%	7%

Pig International Survey (cont.)

HEALTH CARE

15. RANKING OF PIG HEALTH PROBLEMS IMPORTANT TO PRODUCER'S BREEDING HERD** IN 1989: COMBINED AREAS

Percent of (632 reporting) farrowers who cited serious breeding herd health problems..... 92%

Among 579 Producers Who Reported Breeding Herd Health Problems, Percent Assigning A Rank*** Of . . .

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Any Rank
Aujeszky's/pseudorabies.....	4%	3%	1%	1%	1%	*	-	-	-	*	-	-	1%	-	12%
Cannibalism/vices.....	1%	2%	2%	1%	*	1%	1%	1%	1%	*	*	*	*	*	11%
Enteritis/diarrhoea.....	26%	13%	5%	3%	*	1%	1%	*	-	-	*	-	-	-	50%
Erysipelas.....	2%	3%	2%	*	1%	1%	*	*	*	*	*	*	*	-	11%
Feet/leg troubles.....	10%	13%	8%	4%	2%	1%	*	*	*	1%	-	*	-	-	40%
MMA/farrowing fever.....	12%	12%	7%	3%	2%	1%	1%	1%	*	-	-	-	*	-	39%
Internal worm parasites.....	5%	6%	3%	2%	1%	1%	*	1%	*	*	*	*	*	-	21%
External parasites (mange/lice) ..	5%	8%	5%	3%	1%	1%	1%	*	*	1%	*	1%	*	-	27%
Reproductive troubles.....	14%	12%	7%	5%	2%	1%	1%	-	*	*	*	-	-	-	43%
Respiratory infections.....	9%	11%	5%	4%	3%	1%	1%	1%	*	*	*	-	-	-	36%
Stress/PSE.....	1%	3%	3%	1%	1%	1%	*	1%	1%	*	1%	*	-	-	14%
Swine dysentery.....	4%	5%	2%	1%	1%	1%	1%	1%	-	*	*	-	-	-	17%
Swine fever/hog cholera.....	4%	2%	1%	1%	1%	*	1%	*	1%	-	*	1%	-	-	13%
Other.....	3%	2%	*	1%	1%	*	-	-	-	-	-	-	*	*	8%
															342%

Average number of pig breeding herd health problems ranked, per producer ranking any..... 3.4

RANKING OF PIG HEALTH PROBLEMS IMPORTANT TO PRODUCER'S BREEDING HERD** IN 1989: EUROPE

Percent of (216 reporting) farrowers who cited serious breeding herd health problems..... 85%

Among 183 Producers Who Reported Breeding Herd Health Problems, Percent Assigning A Rank*** Of . . .

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Any Rank
Aujeszky's/pseudorabies.....	5%	3%	1%	1%	-	-	-	-	-	-	-	-	-	-	10%
Cannibalism/vices.....	-	4%	2%	1%	1%	-	1%	-	-	-	-	-	-	-	9%
Enteritis/diarrhoea.....	27%	7%	5%	2%	1%	-	2%	-	-	-	-	-	-	-	44%
Erysipelas.....	2%	3%	2%	1%	1%	-	-	-	-	-	-	-	-	-	9%
Feet/leg troubles.....	11%	14%	6%	2%	1%	-	-	-	-	-	-	-	-	-	34%
MMA/farrowing fever.....	12%	13%	3%	1%	2%	1%	1%	1%	-	-	-	-	-	-	34%
Internal worm parasites.....	1%	3%	2%	1%	1%	1%	-	-	-	-	-	-	-	-	9%
External parasites (mange/lice) ..	2%	8%	3%	1%	-	1%	1%	-	-	-	-	-	-	-	16%
Reproductive troubles.....	24%	15%	4%	4%	1%	1%	-	-	-	-	-	-	-	-	49%
Respiratory infections.....	6%	7%	2%	4%	2%	1%	-	1%	-	-	-	-	-	-	23%
Stress/PSE.....	1%	2%	1%	-	1%	-	-	1%	-	-	-	-	-	-	6%
Swine dysentery.....	3%	3%	3%	-	-	-	-	-	-	-	-	-	-	-	9%
Swine fever/hog cholera.....	1%	-	-	-	-	-	-	-	-	-	-	-	-	-	1%
Other.....	5%	4%	1%	1%	-	-	-	-	-	-	-	-	-	-	11%
															264%

Average number of pig breeding herd health problems ranked, per producer ranking any..... 2.6

*Less than 0.5%.

**Sows, boars, piglets to 20 kg.

***Rank "1" = Most serious; "14" = least serious.

15. (cont.)

RANKING OF PIG HEALTH PROBLEMS IMPORTANT TO PRODUCER'S BREEDING HERD** IN 1989: ASIA/PACIFIC AND AFRICA

Percent of (416 reporting) farrowers who cited serious breeding herd health problems..... 95%

Among 396 Producers Who Reported Breeding Herd Health Problems, Percent Assigning A Rank*** Of . . .

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Any Rank
Aujeszky's/pseudorabies.....	4%	3%	1%	1%	2%	1%	-	-	-	1%	-	-	1%	-	14%
Cannibalism/vices.....	1%	1%	2%	1%	*	1%	1%	1%	2%	*	*	1%	*	*	13%
Enteritis/diarrhoea.....	26%	16%	5%	3%	*	1%	1%	1%	-	-	*	-	-	-	54%
Erysipelas.....	3%	3%	1%	*	1%	1%	*	*	*	*	1%	*	1%	-	13%
Feet/leg troubles.....	10%	13%	9%	5%	2%	1%	1%	*	1%	1%	-	*	-	-	44%
MMA/farrowing fever.....	12%	11%	9%	4%	2%	1%	1%	1%	*	-	-	-	*	-	42%
Internal worm parasites.....	6%	7%	4%	3%	1%	1%	1%	1%	1%	1%	1%	*	*	-	28%
External parasites (mange/lice)...	6%	9%	6%	4%	2%	1%	1%	1%	*	1%	1%	1%	*	-	34%
Reproductive troubles.....	10%	11%	8%	5%	2%	1%	2%	-	1%	1%	*	-	-	-	41%
Respiratory infections.....	10%	13%	6%	4%	3%	1%	1%	1%	*	1%	*	-	-	-	41%
Stress/PSE.....	1%	3%	3%	2%	2%	1%	*	1%	1%	1%	1%	*	-	-	17%
Swine dysentery.....	4%	6%	2%	1%	2%	2%	1%	1%	-	*	1%	-	-	-	20%
Swine fever/hog cholera.....	6%	3%	1%	2%	1%	1%	1%	*	1%	-	*	1%	-	-	18%
Other.....	1%	1%	-	1%	1%	*	-	-	-	-	-	-	1%	*	6%
															385%

Average number of pig breeding herd health problems ranked, per producer ranking any..... 3.9

RANKING OF PIG HEALTH PROBLEMS IMPORTANT TO PRODUCER'S FINISHING PIGS IN 1989: COMBINED AREAS

Percent of (546 reporting) producers who cited serious finishing pig health problems..... 88%

Among 481 Producers Who Reported Finishing Pig Health Problems, Percent Assigning A Rank*** Of . . .

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Any Rank
Aujeszky's/pseudorabies.....	4%	3%	1%	1%	*	-	*	*	*	*	-	-	*	-	11%
Cannibalism/vices.....	5%	8%	2%	1%	1%	1%	1%	-	*	*	-	-	*	-	20%
Enteritis/diarrhoea.....	12%	12%	4%	3%	1%	1%	1%	*	-	-	*	-	-	-	35%
Erysipelas.....	2%	4%	1%	1%	*	-	*	*	-	*	-	*	-	-	9%
Feet/leg troubles.....	5%	10%	5%	2%	1%	*	*	*	*	-	*	-	-	-	25%
MMA/farrowing fever.....	*	1%	1%	*	*	-	*	*	-	*	-	-	*	-	4%
Internal worm parasites.....	5%	5%	2%	2%	1%	*	*	*	1%	*	-	-	-	-	17%
External parasites (mange/lice)...	4%	6%	4%	1%	1%	1%	1%	1%	*	*	*	-	-	*	20%
Reproductive troubles.....	*	1%	*	1%	-	*	*	-	-	-	-	-	-	-	3%
Respiratory infections.....	45%	14%	3%	2%	1%	*	1%	*	-	-	-	-	-	-	66%
Stress/PSE.....	3%	9%	6%	2%	1%	*	*	*	1%	*	*	-	-	-	23%
Swine dysentery.....	6%	7%	3%	2%	*	*	1%	-	-	-	-	-	-	-	20%
Swine fever/hog cholera.....	4%	3%	1%	1%	*	*	*	*	*	-	*	-	-	-	11%
Other.....	4%	2%	1%	1%	*	*	-	-	-	-	-	1%	-	-	9%
															273%

Average number of finishing pig health problems ranked, per producer ranking any..... 2.7

*Less than 0.5%.

**Sows, boars, piglets to 20 kg.

***Rank "1" = Most serious; "14" = least serious.

Pig International Survey (cont.)

15. (cont.)

RANKING OF PIG HEALTH PROBLEMS IMPORTANT TO PRODUCER'S FINISHING PIGS IN 1989: **EUROPE**

Percent of (180 reporting) producers who cited serious finishing pig health problems..... 81%

Among 145 Producers Who Reported Finishing Pig Health Problems, Percent Assigning A Rank** Of . . .

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Any Rank
Aujeszky's/pseudorabies.....	5%	2%	1%	-	1%	-	-	-	-	-	-	-	-	-	9%
Cannibalism/vices.....	7%	12%	2%	1%	1%	-	-	-	-	-	-	-	-	-	23%
Enteritis/diarrhoea.....	13%	12%	5%	3%	1%	1%	-	1%	-	-	-	-	-	-	36%
Erysipelas.....	1%	2%	1%	-	-	-	1%	-	-	-	-	-	-	-	5%
Feet/leg troubles.....	5%	9%	2%	1%	1%	-	-	-	-	-	-	-	-	-	18%
MMA/farrowing fever.....	1%	-	1%	-	-	-	-	-	-	-	-	-	-	-	2%
Internal worm parasites.....	2%	1%	3%	-	1%	-	-	-	-	-	-	-	-	-	7%
External parasites (mange/lice).. <td>2%</td> <td>1%</td> <td>1%</td> <td>-</td> <td>1%</td> <td>1%</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>6%</td>	2%	1%	1%	-	1%	1%	-	-	-	-	-	-	-	-	6%
Reproductive troubles.....	-	1%	-	1%	-	-	-	-	-	-	-	-	-	-	2%
Respiratory infections.....	42%	19%	4%	1%	-	-	1%	1%	-	-	-	-	-	-	68%
Stress/PSE.....	5%	9%	2%	1%	-	-	-	-	-	-	-	-	-	-	17%
Swine dysentery.....	12%	5%	1%	-	-	-	-	-	-	-	-	-	-	-	18%
Swine fever/hog cholera.....	-	1%	-	-	-	-	-	-	-	-	-	-	-	-	1%
Other.....	5%	3%	1%	-	-	-	-	-	-	-	-	-	-	-	9%
															221%

Average number of finishing pig health problems ranked, per producer ranking any..... 2.2

RANKING OF PIG HEALTH PROBLEMS IMPORTANT TO PRODUCER'S FINISHING PIGS IN 1989: **ASIA/PACIFIC AND AFRICA**

Percent of (366 reporting) producers who cited serious finishing pig health problems..... 92%

Among 336 Producers Who Reported Finishing Pig Health Problems, Percent Assigning A Rank** Of . . .

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Any Rank
Aujeszky's/pseudorabies.....	4%	4%	1%	1%	*	-	*	1%	*	*	-	-	*	-	12%
Cannibalism/vices.....	4%	7%	3%	1%	1%	2%	1%	-	*	1%	-	-	*	-	21%
Enteritis/diarrhoea.....	12%	13%	3%	3%	1%	1%	1%	*	-	-	*	-	-	-	35%
Erysipelas.....	2%	4%	1%	1%	1%	-	*	*	-	*	-	*	-	-	10%
Feet/leg troubles.....	5%	11%	6%	2%	1%	1%	1%	*	*	-	1%	-	-	-	29%
MMA/farrowing fever.....	*	1%	*	1%	*	-	*	*	-	*	-	-	*	-	4%
Internal worm parasites.....	6%	7%	2%	2%	1%	1%	*	1%	1%	*	-	-	-	-	22%
External parasites (mange/lice).. <td>5%</td> <td>7%</td> <td>5%</td> <td>1%</td> <td>1%</td> <td>*</td> <td>1%</td> <td>1%</td> <td>*</td> <td>*</td> <td>*</td> <td>-</td> <td>-</td> <td>*</td> <td>22%</td>	5%	7%	5%	1%	1%	*	1%	1%	*	*	*	-	-	*	22%
Reproductive troubles.....	*	1%	1%	*	-	1%	1%	-	-	-	-	-	-	-	5%
Respiratory infections.....	46%	12%	2%	2%	1%	*	1%	-	-	-	-	-	-	-	65%
Stress/PSE.....	3%	10%	7%	2%	1%	*	1%	*	1%	*	*	-	-	-	26%
Swine dysentery.....	4%	8%	3%	2%	1%	1%	1%	-	-	-	-	-	-	-	20%
Swine fever/hog cholera.....	5%	4%	1%	2%	1%	1%	1%	1%	*	-	1%	-	-	-	17%
Other.....	3%	2%	1%	1%	*	*	-	-	-	-	-	1%	-	-	9%
															297%

Average number of finishing pig health problems ranked, per producer ranking any..... 3.0

*Less than 0.5%.

**Rank "1" = most serious; "14" = least serious.

Pig International Survey (cont.)

16. "Which of the following health/hygiene products did you use for pig production in 1989?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	817	299	518
Percent of producers reporting:			
Disinfectants/ sanitisers.....	80%	80%	81%
Fogging/fumigation equipment.....	12%	12%	12%
High-pressure washer.	58%	80%	45%
Antibiotics.....	81%	72%	86%
Vaccines.....	78%	78%	78%
(Any of these).....	(100%)	(100%)	(100%)

(a) "If you used any antibiotics or vaccines, from what SOURCE(S) did you obtain these products?"

Sources of Antibiotics

Respondents..	651	210	441
Percent of antibiotic users reporting:			
Medication manu- facturer or distributor....	55%	26%	69%
Feed supplier....	13%	15%	12%
Veterinarian....	51%	73%	40%
Other.....	1%	*	1%

*Less than 0.5%.

Sources of Vaccines

Respondents..	609	217	392
Percent of vaccine users reporting:			
Medication manu- facturer or distributor....	57%	37%	69%
Feed supplier....	5%	4%	5%
Veterinarian....	51%	71%	40%
Other.....	1%	-	1%

17. "If you farrow sows, do you normally give an iron supplement to your baby pigs to PREVENT anaemia?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	793	278	525
Percent of farrowers who answered "Yes".....	97%	97%	97%

"If 'Yes.' . . .

(a) How is the iron given?"

Respondents..	769	270	499
Among producers who normally give iron to prevent anaemia, percent reporting:			
By injection.	95%	97%	94%
By mouth.....	4%	2%	5%
In water.....	4%	2%	5%
Other.....	1%	-	1%

(b) "Did you change your type or brand of iron supplement in 1989?"

Respondents..	691	234	457
Among producers who normally give iron to prevent anaemia, percent who answered "Yes".....	22%	13%	27%

Pig International Survey (cont.)

18. "Do you give an anthelmintic (wormer) to your pigs?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	820	297	523
Percent of producers who answered "Yes"....	84%	77%	88%

If "yes" . . .

(a) "How often is the wormer given?"

Respondents..	671	222	449
Among producers who give anthel- mintics to their pigs, percent reporting:			
At regular intervals..	79%	83%	77%
Only occa- sionally...	21%	17%	23%

(b) "How is the wormer administered?"

Respondents..	684	229	455
Among producers who give anthel- mintics to their pigs, percent reporting:			
In feed.....	79%	74%	82%
By injection	29%	34%	27%
Other.....	4%	2%	6%

(c) "Did you change your type or brand of wormer in 1989?"

Respondents..	628	195	433
Among producers who give anthel- mintics to their pigs, percent who changed their wormer in 1989	30%	23%	33%

19. "Do you make use of WATER MEDICATION to control any pig health problem other than anaemia?"

Respondents..	767	274	493
Percent of producers who answered "Yes"....	43%	38%	46%

EQUIPMENT

20. "Which of the following pig housing environmental items do you use?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	811	295	516
Percent of producers reporting:			
Water sprinklers for cooling.....	31%	9%	44%
(Power ventilation or fans).....	(59%)	(88%)	(41%)
Manual control....	32%	33%	32%
Automatic or computer control	34%	72%	13%
Heat saving and recycling system...	7%	12%	5%
Air deodorizing method.....	2%	1%	3%
Dust control system..	3%	1%	4%
(Any of these).....	(74%)	(91%)	(65%)

21. "What type(s) of heating do you use in your pig houses?"

Pregnancy or Farrowing

Respondents..	745	274	471
Percent of producers reporting:			
Gas heaters.....	12%	12%	12%
Electrical infrared lamps.....	57%	71%	49%
In-floor electrical..	7%	9%	6%
In-floor hot-water...	10%	26%	1%
Hot-water radiators..	5%	14%	*
Whole-housing heating	5%	6%	4%
Other.....	4%	1%	6%
(Any).....	(79%)	(94%)	(70%)

*Less than 0.5%.

Pig International Survey (cont.)

21. (cont.)

	Combined Areas	Europe	Asia/Pacific and Africa
<u>Litters After Weaning</u>			
Respondents..	647	247	400
Percent of producers reporting:			
Gas heaters.....	13%	16%	11%
Electrical infrared lamps.....	30%	33%	28%
In-floor electrical..	7%	11%	5%
In-floor hot-water...	8%	15%	3%
Hot-water radiators..	8%	19%	1%
Whole-house heating..	14%	23%	8%
Other.....	4%	3%	5%
(Any).....	(71%)	(94%)	(56%)

Growing-Finishing

Respondents..	458	146	312
Percent of producers report:			
Gas heaters.....	5%	7%	4%
Electrical infrared lamps.....	5%	1%	7%
In-floor electrical..	1%	1%	*
In-floor hot-water...	3%	5%	2%
Hot-water radiators..	3%	11%	-
Whole-house heating..	5%	9%	4%
Other.....	2%	2%	2%
(Any).....	(22%)	(30%)	(18%)

*Less than 0.5%.

22. "What type(s) of waterer(s) do you use?"

	Combined Areas	Europe	Asia/Pacific and Africa
<u>Pregnancy or Farrowing</u>			
Respondents..	759	264	495
Percent of producers reporting:			
Bowls.....	31%	21%	37%
Snout-operated nipples.....	52%	65%	45%
Nipples/nozzles other than snout-operated	21%	23%	20%
Other.....	6%	5%	6%

Litters After Weaning

Respondents..	739	258	481
Percent of producers reporting:			
Bowls.....	24%	21%	26%
Snout-operated nipples.....	56%	57%	55%
Nipples/nozzles other than snout-operated	25%	32%	21%
Other.....	2%	2%	3%

Growing-Finishing

Respondents..	713	240	473
Percent of producers reporting:			
Bowls.....	19%	20%	19%
Snout-operated nipples.....	55%	53%	57%
Nipples/nozzles other than snout-operated	27%	34%	23%
Other.....	4%	5%	4%

Pig International Survey (cont.)

23. OTHER TYPES OF FARM EQUIPMENT USED

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	812	295	517
Percent of producers reporting:			
Computer for herd recording.....	36%	49%	28%
Operation alarm system	14%	32%	3%
Closed-circuit television survey system	1%	2%	1%
Stand-by electric generator.....	34%	36%	33%
Incinerator.....	11%	8%	13%
Pig-weighing scales...	72%	60%	79%
Farm tractor.....	54%	71%	45%
Front-end loader (tractor-mounted or self-propelled)....	28%	44%	19%
(Any of these).....	(92%)	(93%)	(91%)

24. "Which of the following of your pig business items - or any portion of them - were produced OUTSIDE your own country?"

Respondents..	773	272	501
Percent of producers reporting:			
Breeding pigs.....	28%	14%	36%
Pig house(s).....	5%	7%	4%
Pens.....	5%	6%	4%
Flooring.....	16%	23%	13%
Feeding equipment....	28%	35%	24%
Waterers.....	27%	24%	29%
Ventilation equipment	22%	31%	18%
Heating equipment....	18%	16%	19%
Manure equipment.....	10%	12%	9%
(Any of these).....	(67%)	(68%)	(67%)

25. "Do you plan to buy any pig production equipment in the next two years?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	796	290	506
Percent of producers who answered "Yes".....	74%	74%	73%

(a) "If 'yes,' what type(s)?"

Respondents..	582	212	370
Among producers who planned to buy pig production equipment in the subsequent two years, percent reporting:			
Flooring.....	41%	47%	38%
Feeding equipment....	61%	65%	59%
Watering equipment....	40%	35%	42%
Ventilation equipment....	42%	52%	36%
Heating equipment....	24%	27%	22%
Manure equipment....	35%	37%	34%
Other.....	5%	8%	3%

(b) ITEMS THAT NEED THE MOST IMPROVEMENT IN DESIGN, CONSTRUCTION OR PERFORMANCE

Respondents..	298	109	189
Percent of producers reporting:			
Flooring.....	19%	15%	22%
Feeding equipment	28%	22%	32%
Watering equipment.....	10%	8%	11%
Ventilation equipment.....	24%	31%	20%
Heating equipment	8%	13%	6%
Manure equipment	24%	22%	25%
Other.....	2%	4%	1%

Pig International Survey (cont.)

HOUSING

26. "What type(s) of housing do you use for your litters immediately after weaning?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	785	272	513
Percent of farrowers reporting:			
Stay in farrowing pen.....	23%	15%	27%
Elevated flat-decks or cages.....	37%	42%	34%
Floor-level group pen.....	40%	36%	42%
Covered indoor kennels.....	13%	21%	8%
Other.....	3%	4%	3%

27. "What type(s) of pen floor(s) do you use?"

Pregnancy or Farrowing

Respondents..	771	270	501
Percent of farrowers reporting:			
Solid.....	36%	29%	39%
Part slatted....	53%	69%	45%
Fully slatted....	21%	17%	23%
Other.....	2%	1%	2%

Litters After Weaning

Respondents..	766	271	495
Percent of farrowers reporting:			
Solid.....	30%	20%	36%
Part slatted....	36%	41%	33%
Fully slatted....	40%	50%	34%
Other.....	1%	*	1%

Growing-Finishing

Respondents..	747	256	491
Among producers who have growing-finishing pigs, percent reporting:			
Solid.....	53%	31%	64%
Part slatted....	37%	49%	30%
Fully slatted....	20%	36%	12%
Other.....	1%	1%	1%

(a) "If slatted, what type(s) of slats?"

	Combined Areas	Europe	Asia/Pacific and Africa
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Pregnancy or Farrowing

Respondents..	532	211	321
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Among farrowers who use slatted floors in their pregnancy or farrowing pens, percent reporting:

Aluminium.....	3%	5%	2%
Plastic.....	18%	24%	15%
Cast iron.....	26%	26%	26%
Concrete.....	37%	42%	34%
Expanded metal....	6%	9%	3%
Iron/steel T-bars	14%	13%	14%
Triangular bars...	9%	18%	3%
Perforated metal..	5%	10%	2%
Plastic-coated grids.....	4%	2%	6%
Wood.....	4%	-	7%
Woven wire or wiremesh.....	17%	11%	21%
Other.....	2%	1%	2%

Litters After Weaning

Respondents..	545	227	318
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Among farrowers who use slatted floors in their after-weaning litter pens, percent reporting:

Aluminium.....	2%	4%	1%
Plastic.....	21%	26%	17%
Cast iron.....	17%	11%	22%
Concrete.....	25%	25%	25%
Expanded metal....	9%	16%	4%
Iron/steel T-bars.	13%	15%	12%
Triangular bars...	9%	18%	3%
Perforated metal..	3%	5%	2%
Plastic-coated grids.....	5%	4%	5%
Wood.....	4%	*	6%
Woven wire or wiremesh.....	18%	15%	20%
Other.....	1%	1%	2%

*Less than 0.5%.

Pig International Survey (cont.)

27. (cont.)

	Combined Areas	Europe	Asia/Pacific and Africa
Growing-Finishing			
Respondents..	386	189	197
Among producers who use slatted floors in their growing-finishing pens, percent reporting:			
Aluminium..... *	-	-	1%
Plastic.....	4%	5%	3%
Cast iron.....	6%	5%	8%
Concrete.....	83%	88%	79%
Expanded metal....	3%	4%	3%
Iron/steel T-bars..	4%	3%	5%
Triangular bars....	2%	3%	2%
Perforated metal...	2%	1%	3%
Plastic-coated grids.....	1%	1%	1%
Wood.....	6%	-	12%
Woven wire or wiremesh.....	6%	5%	7%
Other.....	1%	1%	2%

28. "Did you buy any commercial product in 1989 for the control of rats, mice or other rodents in your pig house(s)?"

Respondents..	819	297	522
Percent of producers who answered "Yes".....	71%	83%	65%

29. "Have you received any COMPLAINTS from neighbours or local authorities in the last 2 years about flies, odours or water pollution said to be caused by your pig farm?"

Respondents..	810	292	518
Percent of producers who answered "Yes".....	35%	23%	42%

30. "In which of the following ways do you treat your pig manure?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	799	285	514
Percent of producers reporting:			
Solids separation....	30%	28%	31%
Aeration/oxidation...	17%	13%	19%
Anaerobic digestion (producing biogas)...	13%	5%	18%
Drying.....	21%	4%	30%
Other.....	13%	8%	15%
None.....	28%	53%	15%

(a) "If 'None,' do you intend to install a manure treatment system in the next 24 months?"

Respondents..	212	144	68
Among producers who do not treat their pig manure, percent who answered "Yes"...	24%	13%	49%

(1) MANURE TREATMENT SYSTEM
EXPECTED TO BE INSTALLED

Respondents..	37	16**	21
Among producers who intend to install a manure treatment system, percent reporting:			
Solids separation	51%	56%	48%
Aeration/ oxidation...	11%	13%	10%
Anaerobic digestion (producing biogas)...	30%	25%	33%
Drying.....	8%	6%	10%
Other.....	-	-	-

*Less than 0.5%.

**Percentages of this base should be viewed with more than usual caution.

Pig International Survey (cont.)

INFORMATION SOURCES

31. "Before you buy any housing, equipment, breeding pigs, or health products, where do you look for reliable information about them?"

	Combined Areas			Europe			Asia/Pacific and Africa		
	Percent of producers reporting for . . .								
	Housing/ Equipment	Breeding Pigs	Health Products	Housing/ Equipment	Breeding Pigs	Health Products	Housing/ Equipment	Breeding Pigs	Health Products
Respondents..	779	699	745	282	236	263	497	463	482
Trade exhibitions.....	42%	22%	17%	57%	27%	20%	33%	20%	16%
Advisory service.....	30%	28%	20%	37%	36%	25%	26%	24%	17%
Other pig producers.....	41%	40%	22%	50%	42%	25%	37%	40%	21%
Veterinarian.....	18%	27%	69%	17%	26%	75%	18%	27%	66%
Feed supplier.....	7%	5%	11%	10%	8%	14%	5%	3%	9%
(Magazines).....	(63%)	(39%)	(46%)	(66%)	(38%)	(46%)	(62%)	(39%)	(45%)
Magazine articles.....	49%	29%	35%	59%	33%	42%	44%	26%	31%
Magazine advertisements.	40%	23%	28%	38%	19%	24%	41%	25%	30%
Salesman.....	16%	12%	21%	20%	14%	14%	14%	12%	24%
Personal trial results....	25%	27%	23%	29%	32%	26%	23%	24%	21%
Other.....	1%	1%	*	1%	1%	*	1%	1%	*
None.....	2%	2%	1%	1%	3%	1%	2%	2%	1%

*Less than 0.5%.

Pig International Survey (cont.)

32. "In what area(s) of pig production would you like more INFORMATIVE advertising?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	792	280	512
Percent of producers reporting:			
Pig breeding/genetics.....	56%	42%	64%
Feeding of breeding pigs.....	41%	35%	44%
Feeding of small pigs.....	47%	45%	48%
Feeding of finishing pigs.....	35%	35%	35%
Watering systems....	20%	23%	19%
Health control.....	61%	49%	68%
Pen floors.....	21%	25%	19%
Ventilation/climate control.....	35%	45%	30%
Other.....	7%	8%	6%
(Any).....	(96%)	(92%)	(99%)

33. (cont.)

	Combined Areas	Europe	Asia/Pacific and Africa
Among producers who share their copy of Pig International, average number of pass-along readers per copy.....	5.6	3.8	6.2
Among all producers, average number of pass-along readers per copy.....	3.5	1.7	4.5

34. "How often do you refer to the annual PIG INTERNATIONAL BUYER'S GUIDE (July directory issues)?"

Respondents..	739	266	473
Percent of producers reporting:			
More than once per month.....	9%	5%	12%
Once per month.....	9%	10%	8%
Several times per year.....	42%	35%	46%
Only when it is first received (once per year).....	39%	51%	33%

33. "Do you share your copy of PIG INTERNATIONAL with anyone else?"

Respondents..	812	294	518
Percent of producers who answered "Yes"....	62%	44%	73%

(a) "If 'yes,' about how many other people share your copy of Pig International?"

Respondents..	464	121	343
Among producers who share their copy of Pig International, percent reporting:			
10 or more other people.....	17%	7%	21%
5 - 9 other people.....	23%	17%	25%
3 or 4 other people.....	30%	29%	30%
1 or 2 other people.....	30%	47%	24%

35. "Do you regularly receive any foreign pig magazines other than PIG INTERNATIONAL? (do not include magazines published in your own country)"

Respondents..	807	286	521
Percent of producers who answered "Yes"....	30%	28%	31%

(a) "If 'yes,' which of the following magazines?"

Respondents..	236	79	157
Percent of 'yes'-answering producers reporting:			
Pig Farming....	49%	58%	44%
Pigs (Misset). .	37%	34%	39%
Porc Magazine. .	5%	10%	3%
None of these. .	24%	18%	27%

36. "Did you visit any agricultural trade shows outside your own country in the last three years?"

	Combined Areas	Europe	Asia/Pacific and Africa
Respondents..	820	296	524
Percent of producers who answered "Yes".....	33%	53%	21%

(a) "If 'yes,' which one(s)?"

Respondents..	256	156	100
Among producers who visited agricultural trade shows outside their country in the preceding three years, percent reporting:			
Agromek, Denmark.....	15%	20%	8%
Expoaviga, Spain.....	7%	10%	2%
Huhn & Schwein, West Germany.....	32%	38%	22%
Rassegna Suinicola, Italy.....	4%	7%	-
SIMAVIP, France.....	18%	26%	5%
UK Pig Fair, UK.....	25%	28%	19%
VIV-Asia, Japan.....	32%	38%	22%
VIV-Europe, Holland.....	30%	37%	19%
World Pork Expo, USA.....	13%	3%	27%
Other, written-in:			
Royal Agricultural Show, UK.....	3%	-	7%
Agrotica, Greece.....	1%	1%	2%
Ontario Pork Congress, Canada....	1%	1%	1%
Salisbury Laboratories Fair, USA..	1%	-	2%
Other, not specified.....	12%	10%	16%

EDITOR'S GUIDE

CONFIDENTIAL INFORMATION

To help improve
PIG INTERNATIONAL

The confidential information you give here is vitally important to me in making future issues of PIG INTERNATIONAL still more useful to you.

Peter Best, Editor



START HERE

1. Please mark (✓) each of the following pig business activities you are engaged in.

- (5)-1 ☐ Farrow and finish for slaughter
 2 ☐ Farrow and sell piglets (weaners)
 3 ☐ Buy weaned pigs for finishing
 4 ☐ Produce **breeding** pigs for sale
 5 ☐ Slaughter pigs and/or process pigmeat
 6 ☐ Market pigmeat - wholesale and/or retail
 7 ☐ Other _____

If you do **not** farrow, finish, or breed pigs commercially (for meat or for breeding purposes) please mark here () and return the questionnaire.

(6)

2. If you are a pig producer, please indicate below the size of the operation under your control.

Number of **sows** on farm now, if any number
(7-11)

Number of **growing-finishing** pigs on farm now, if any number
(12-16)

Number of pigs of **all** types on farm now - including sows, boars, and suckling or finishing pigs number
(17-22)

3. Do you expect to expand your pig operation in the next 24 months?

(23)-1 ☐ Yes 2 ☐ No

If you do **not** have any breeding sows, please skip to question 9.

Breeding

4. If you have breeding sows, what is the source of your **gilt** replacements? (please mark all that apply)

- (24)-1 ☐ Hybrid company
 2 ☐ Purebred breeder
 3 ☐ Own herd
 4 ☐ Other (please specify) _____

(a) From which source(s) do you obtain boars? (please mark all that apply)

- (25)-1 ☐ Hybrid company
 2 ☐ Purebred breeder
 3 ☐ Own herd
 4 ☐ Other (please specify) _____

5. What are your 2 most important considerations when you buy breeding pigs? (please mark)

- (27)-1 ☐ Test results
 2 ☐ Conformation
 3 ☐ Health status
 4 ☐ Price
 5 ☐ Guarantee that all pigs will come from a single source
 6 ☐ Reputation of supplier
 7 ☐ Follow-up service
 8 ☐ Other _____

6. Do you use artificial insemination to mate sows or gilts?

(28)-1 ☐ Yes 2 ☐ No

(a) If "yes," what is the source of the semen? (please mark)

- (29)-1 ☐ Purchased
 2 ☐ From our own boars
 3 ☐ Other _____

7. Do you use a sow pregnancy detection machine?

(30)-1 ☐ Yes 2 ☐ No

8. At about what age do you wean litters? (please mark)

- (31)-1 ☐ Under 2 weeks
 2 ☐ 2 weeks
 3 ☐ 3 weeks
 4 ☐ 4 weeks
 5 ☐ 5 weeks
 6 ☐ 6 weeks
 7 ☐ 7 weeks or older

Feeding

9. What is the source of your pig feed? (please mark)

	Piglet Feed	Other Feed
Prepared on the farm	(32)-1 ☐	(33)-1 ☐
Purchased as complete diet	2 ☐	2 ☐
Other (please specify) _____	3 ☐	3 ☐

(a) If you prepare feed on the farm, what do you mix? (please mark)

- (34)-1 ☐ Grains plus a balancer supplement
 2 ☐ Grains and protein ingredients plus a vitamin-mineral premix
 3 ☐ Waste by-products plus a balancer supplement
 4 ☐ All individual ingredients
 5 ☐ Other (please specify) _____

turn to page 2

10. Which of the following types of equipment are used in your pig business for feed preparation and handling?

- (35)-1 ☐ Feed grinder
 2 ☐ Feed mixer
 3 ☐ Pellet press
 4 ☐ Powered conveyor or auger
 5 ☐ Bulk feed bins (storage silos)
 6 ☐ Computer for feed formulation
 7 ☐ None of the above

11. How do you supply feed to your pigs? (please mark all that apply)

	Sows	Young Pigs	Growing-Finishing
Manually (by hand)	☐	☐	☐ (36)
Semi-automatically (mechanically but requiring some manual filling)	☐	☐	☐ (37)
Fully automatically (requiring no manual filling)	☐	☐	☐ (38)

12. If you have sows and/or young pigs, do their feeds normally contain medication? (please mark)

	Sows	Young Pigs
Yes . . . (39)	☐	☐ (40)
No . . .	☐	☐

13. If you finish pigs for slaughter, does the finishing feed normally contain a growth promoter?

(41)-1 ☐ Yes 2 ☐ No

- (a) If "yes," did you change your brand of growth promoter in 1989?

(42)-1 ☐ Yes 2 ☐ No

14. Which type of feeding system do you use for your pigs, dry, or liquid? (please mark)

- (43)-1 ☐ Dry feeding only
 2 ☐ Liquid feeding only
 3 ☐ Use both types
 4 ☐ Other

- (a) If you use a liquid feeding system, on which animals? (please mark)

- (44)-1 ☐ Breeding sows only
 2 ☐ Growing-finishing pigs only
 3 ☐ Both breeding and finishing pigs
 4 ☐ Other (please specify) _____

(80)-1

Health Care

15. Which pig health problems were important to your breeding herd and your finishing pigs in 1989? (please rank by writing "1" alongside your most serious problem, "2" next to the second most serious, and so on - only for diseases that were important to you.)

15. (cont.)

Diseases	Breeding Herd (sows, boars, piglets to 20 kg)	Finishing Pigs (pigs 20 kg to market)
Aujeszky's/pseudorabies	(5-6) _____	(34-35) _____
Cannibalism/vices	(7-8) _____	(36-37) _____
Enteritis/diarrhoea	(9-10) _____	(38-39) _____
Erysipelas	(11-12) _____	(40-41) _____
Feet/leg troubles	(13-14) _____	(42-43) _____
MMA/farrowing fever	(15-16) _____	(44-45) _____
Internal worm parasites	(17-18) _____	(46-47) _____
External parasites (mange/lice)	(19-20) _____	(48-49) _____
Reproductive troubles	(21-22) _____	(50-51) _____
Respiratory infections	(23-24) _____	(52-53) _____
Stress/PSE	(25-26) _____	(54-55) _____
Swine dysentery	(27-28) _____	(56-57) _____
Swine fever/hog cholera	(29-30) _____	(58-59) _____
Other	(31-32) _____	(60-61) _____
None	(33) ☐	(62) ☐

16. Which of the following health/hygiene products did you use for pig production in 1989? (please mark)

- (63)-1 ☐ Disinfectants/sanitiser
 2 ☐ Fogging/fumigation equipment
 3 ☐ High-pressure washer
 4 ☐ Antibiotics
 5 ☐ Vaccines
 6 ☐ None of these

- (a) If you used any antibiotics or vaccines, from what source(s) did you obtain these products? (please mark all that apply)

	Antibiotics	Vaccines
Medication manufacturer or distributor	(64) ☐	(65) ☐
Feed supplier	☐	☐
Veterinarian	☐	☐
Other	_____	_____

17. If you farrow sows, do you normally give an iron supplement to your baby pigs to prevent anaemia?

(66)-1 ☐ Yes 2 ☐ No

If "yes" . . .

- (a) How is the iron given? (please mark)

- (67)-1 ☐ By injection
 2 ☐ By mouth
 3 ☐ In water
 4 ☐ Other (please specify) _____

- (b) Did you change your type or brand of iron supplement in 1989?

(74)-1 ☐ Yes 2 ☐ No

18. Do you give an anthelmintic (wormer) to your pigs?

(68)-1 ☐ Yes 2 ☐ No

If "yes" . . .

- (a) How often is the wormer given? (please mark)

- (69)-1 ☐ At regular intervals
 2 ☐ Only occasionally

(b) How is the wormer administered? (please mark)

(70)-1 ☐ In feed

2 ☐ By injection

3 ☐ Other (please specify) _____

(c) Did you change your type or brand of wormer in 1989?

(71)-1 ☐ Yes 2 ☐ No

19. Do you make use of **water medication** to control any pig health problem **other than** anaemia?

(72)-1 ☐ Yes 2 ☐ No

Equipment

20. Which of the following pig housing environmental items do you use? (please mark)

(73)-1 ☐ Water sprinklers for cooling

2 ☐ Power ventilation or fans - **manual** control

3 ☐ Power ventilation or fans - **automatic** or computer control

4 ☐ Heat saving and recycling system

5 ☐ Air deodorizing method

6 ☐ Dust control system

7 ☐ None of these

(80)-2

21. What type(s) of heating do you use in your pig houses? (please mark)

	Pregnancy or Farrowing	Litters After-Weaning	Growing- Finishing
Gas heaters	(5)-1 ☐	(6) ☐	(7) ☐
Electrical infrared lamps	2 ☐	☐	☐
In-floor electrical	3 ☐	☐	☐
In-floor hot-water	4 ☐	☐	☐
Hot-water radiators	5 ☐	☐	☐
Whole-house heating	6 ☐	☐	☐
Other (please specify)	7 ☐	☐	☐
None	8 ☐	☐	☐

22. What type(s) of waterer(s) do you use? (please mark)

	Pregnancy or Farrowing	Litters After-Weaning	Growing- Finishing
Bowls	(8)-1 ☐	(9) ☐	(10) ☐
Snout-operated nipples	2 ☐	☐	☐
Nipples/nozzles other than snout-operated	3 ☐	☐	☐
Other (please specify)	☐	☐	☐

23. Please mark each of the following other types of farm equipment which you use.

(11)-1 ☐ Computer for herd recording

2 ☐ Operation alarm system

3 ☐ Closed-circuit television survey system

4 ☐ Stand-by electric generator

5 ☐ Incinerator

6 ☐ Pig-weighing scales

7 ☐ Farm tractor

8 ☐ Front-end loader

9 ☐ (tractor-mounted or self-propelled)

☐ None of these

24. Which of the following of your pig business items - or any portion of them - were produced **outside** your own country? (please mark)

(12)-1 ☐ Breeding pigs

2 ☐ Pig house(s)

3 ☐ Pens

4 ☐ Flooring

5 ☐ Feeding equipment

6 ☐ Waterers

7 ☐ Ventilation equipment

8 ☐ Heating equipment

9 ☐ Manure equipment

0 ☐ None of these

25. Do you plan to buy any pig production equipment in the next two years?

(13)-1 ☐ Yes 2 ☐ No

(a) If "yes," what type(s) (please mark)

(14)-1 ☐ Flooring

2 ☐ Feeding equipment

3 ☐ Watering equipment

4 ☐ Ventilation equipment

5 ☐ Heating equipment

6 ☐ Manure equipment

7 ☐ Other (please specify) _____

(b) Please make a circle around the item in question 25(a) that you think **needs** the most **improvement** in design, construction or performance. (15)

Housing

26. What type(s) of housing do you use for your litters immediately after weaning? (please mark)

(16)-1 ☐ Stay in farrowing pen

2 ☐ Elevated flat-decks or cages

3 ☐ Floor-level group pen

4 ☐ Covered indoor kennels

5 ☐ Other (please specify) _____

27. What type(s) of pen floor(s) do you use? (please mark)

	Pregnancy or Farrowing	Litters After-Weaning	Growing- Finishing
Solid	(17) ☐	(18) ☐	(19) ☐
Part slatted	☐	☐	☐
Fully slatted	☐	☐	☐
Other	☐	☐	☐

(a) If slatted, what type(s) of slats? (please mark)

	Pregnancy or Farrowing	Litters After-Weaning	Growing- Finishing
Aluminum	(20)-1 ☐	(21) ☐	(22) ☐
Plastic	2 ☐	☐	☐
Cast iron	3 ☐	☐	☐
Concrete	4 ☐	☐	☐
Expanded metal	5 ☐	☐	☐
Iron/steel T-bars	6 ☐	☐	☐
Triangular bars	7 ☐	☐	☐
Perforated metal	8 ☐	☐	☐
Plastic-coated grids	9 ☐	☐	☐
Wood	0 ☐	☐	☐
Woven wire or wiremesh	x ☐	☐	☐
Other (please specify)	y ☐	☐	☐

please turn to back page

Please return this folder even if answered only partly.

28. Did you buy any commercial product in 1989 for the control of rats, mice or other rodents in your pig house(s)?
(23)-1 ☐ Yes 2 ☐ No

29. Have you received any **complaints** from neighbours or local authorities in the last 2 years about flies, odours or water pollution said to be caused by your pig farm?
(24)-1 ☐ Yes 2 ☐ No

30. In which of the following ways do you treat your pig manure? (please mark)
(25)-1 ☐ Solids separation
2 ☐ Aeration/oxidation
3 ☐ Anaerobic digestion (producing biogas)
4 ☐ Drying
5 ☐ Other (please specify) _____
6 ☐ None

(a) If "None," do you intend to install a manure treatment system in the next 24 months?
(26)-1 ☐ Yes 2 ☐ No

(27) (1) If "Yes," please make a circle around the treatment method in question 30 that you expect to install.

Information Sources

31. Before you buy any housing, equipment, breeding pigs, or health products, where do you look for reliable information about them?

	Housing/ Equipment	Breeding Pigs	Health Products
Trade exhibitions (28)-1 ☐	(29) ☐	(30) ☐	
Advisory service 2 ☐	☐	☐	☐
Other pig producers 3 ☐	☐	☐	☐
Veterinarian 4 ☐	☐	☐	☐
Feed supplier 5 ☐	☐	☐	☐
Magazine articles 6 ☐	☐	☐	☐
Magazine advertisements 7 ☐	☐	☐	☐
Salesman 8 ☐	☐	☐	☐
Personal trial results 9 ☐	☐	☐	☐
Other (please specify) 0 _____			
None x ☐	☐	☐	☐

32. In what area(s) of pig production would you like more **informative** advertising? (please mark)

- (31)-1 ☐ Pig breeding/genetics
2 ☐ Feeding of breeding pigs
3 ☐ Feeding of small pigs
4 ☐ Feeding of finishing pigs
5 ☐ Watering systems
6 ☐ Health control
7 ☐ Pen floors
8 ☐ Ventilation/climate control
9 ☐ Other _____
0 ☐ None

33. Do you share your copy of **Pig International** with anyone else?

(32)-1 ☐ Yes 2 ☐ No

(a) If "yes," about how many other people share your copy of **Pig International**?

_____ number (33-34)

34. How often do you refer to the annual **Pig International Buyer's Guide** (July directory issues)? (please mark)

- (35)-1 ☐ More than once per month
2 ☐ Once per month
3 ☐ Several times per year
4 ☐ Only when it is first received (once per year)

35. Do you regularly receive any foreign pig magazines other than **Pig International**? (do not include magazines published in your own country)

(36)-1 ☐ Yes 2 ☐ No

(a) If "yes," which of the following magazines? (please mark)

- (37)-1 ☐ Pig Farming
2 ☐ Pigs (Misset)
3 ☐ Porc Magazine
4 ☐ None of these

36. Did you visit any agricultural trade shows outside your own country in the last three years?

(38)-1 ☐ Yes 2 ☐ No

(a) If "yes," which one(s)? (please mark)

- (39)-1 ☐ Agromek, Denmark
2 ☐ Expoaviga, Spain
3 ☐ Huhn & Schwein, West Germany
4 ☐ Rasseigna Suinicola, Italy
5 ☐ SIMAVIP, France
6 ☐ UK Pig Fair, UK
7 ☐ VIV-Asia, Japan
8 ☐ VIV-Europe, Holland
9 ☐ World Pork Expo, USA
0 ☐ Other (please specify) _____

(80)-3

Thank you for returning this folder promptly. We appreciate your interest in **Pig International**, and I am sure this information will help us to make it even more valuable to you.

Peter Best, Editor

PIG INTERNATIONAL
122 S. Wesley Ave.
Mount Morris, Illinois 61054-1497
U.S.A.

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PUBLISHING